



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,778	12/22/2000	Petter Ericson	63916	1420
2292 7590 03/23/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER XIAO, KE	
			ART UNIT	PAPER NUMBER
			2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/23/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/23/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/746,778	<b>Applicant(s)</b> ERICSON, PETTER	
	<b>Examiner</b> Ke Xiao	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 61-63 is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 42** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding **Claim 42**, according to TC2600 QAS' interpretation of the Interim 101 Guidelines, the wording of Claim 42 is NOT acceptable, it should be equivalent in scope to "a computer readable medium encoded with a computer program comprising instructions for causing the computer to" in order to define a direct relationship with the code on the computer readable medium and the functionality of said code. Please refer to Interim 101 Guidelines Pg. 53 lines 7-10 for more details.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

**Claims 1-60** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **Claims 1-60**, the term "practicable usable surface" in Claims 1, 17, 18, 26, 42, 45 and 53 is a relative term, which renders the claims indefinite. The term "practicable usable surface" is not defined by the claim and the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Practicable and usable are inherently relative terms depending on the situation. For examiner a football field is a huge practicable and usable area however the same sized area for a travel map is neither practicable nor usable. The claim needs to further define the terms practicable and usable.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-9, 12, 18-24, 26-34, 36 and 42** are rejected under 35 U.S.C. 102(b) as being anticipated by Bates (US 5,515,491).

Regarding independent **Claim 1**, Bates teaches a system for information management (Bates, Fig. 16A system 6) comprising:

a central unit (Bates, Fig. 16A element 12); and

a plurality of user units which are arranged to record and send information to the central unit (Bates, Fig. 16A, elements 12a-12c), wherein particulars are stored in the central unit about a plurality of regions (Bates, Figs. 4 and 16A, elements 64), each of which represents an area on at least one imaginary surface (Bates, Figs. 4 element 123 and the window shown on the screen being the imaginary surface), wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface (Bates, Fig. 4),

each of the user units is arranged to record information which comprises at least one position on the imaginary surface and to send the information to the central unit (Bates, Figs. 16A-19, Col. 10 line 58 - Col. 12 line 46), and

the central unit is arranged, in response to the receipt of the information from a user unit, to identify to which region the at least one position belongs and to determine how the information is to be managed based on the region affiliation (Bates, Fig. 4 elements 130, 138 and 140).

Regarding independent **Claim 18**, Bates teaches a central unit for information management (Bates, Fig. 16A element 12) comprising:

a memory storing particulars about a plurality of regions (Bates, Fig. 16A element 64), each region corresponding to an area on an imaginary surface (Bates, Figs. 4 and 16A), wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single

Art Unit: 2629

practicable usable surface (Bates, Fig. 4), and the memory further containing instructions for determining, in response to the receipt of information which contains at least one position on the imaginary surface, to which region the at least one position belongs, and determining how the information is to be managed based on the region affiliation (Bates, Figs. 4 and 19, Col. 3 lines 1-50).

Regarding independent **Claim 26**, Bates teaches a method for management of information which is recorded using at least one user unit comprising (Bates, Fig. 16A system 6):

recording information by each user unit, which includes at least one position on at least one imaginary surface (Bates, Figs. 4 and 16A, elements 12a-12c, 80), wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface (Bates, Fig. 4);

receiving the information at a central unit, wherein the central unit contains particulars about a plurality of regions, further wherein each region represents an area on the at least one imaginary surface (Bates, Figs. 4, 16A and 19),

identifying, in response to the receipt of the information from the user unit, to which region the position belongs (Bates, Figs. 4, 16A and 19),

determining how to manage the information based on the region affiliation (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding independent **Claim 42**, Bates teaches a storage medium for digital information which is readable by a computer system (Bates, Fig. 16A element 64), in which the storage medium contains a computer program which comprises instructions for causing a processor to determine (Bates, Fig. 16A and 19, element 60), in response to the receipt of information which contains at least one position on an imaginary surface, wherein the imaginary surface represents physical positions in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface (Bates, Fig. 4), to which region on the imaginary surface the at least one position belongs (Bates, Figs. 4, 16A and 19), and to determine how the information is to be managed based on the region affiliation (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 2, 19 and 27**, Bates further teaches that each of the particulars of each of the regions are stored in the central unit about an owner of the region (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 3, 20 and 28**, Bates further teaches that rules for each region are stored in the central unit for how the information, which is identified as belong to the region is to be managed (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 4, 21 and 29**, Bates further teaches that the central unit is arranged to forward the information, which is received from the user unit to a recipient (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 5 and 30**, Bates further teaches that the recipient is defined by the region affiliation (Bates, Col. 3 lines 1-50, Col. 5 lines 43-58).

Regarding **Claim 6**, Bates further teaches that the recipient is one of the user units (Bates, Col. 3 lines 1-50).

Regarding **Claims 7, 22, and 32**, Bates further teaches that the central unit is arranged to attach a predetermined file for the recipient, which file is determined by the region affiliation (Bates, Fig. 16A-C and 20, Col. 12 lines 46 to Col. 13 line 24, files are inherently defined as data, which when transmitted across a network are converted into data packets).

Regarding **Claims 8, 23 and 33**, Bates further teaches that the central unit is arranged to store the information, which is received from the user unit in a location, which is indicated by the region affiliation (Bates, Fig. 16A and 19).

Regarding **Claims 9, 24 and 34**, Bates further teaches that the central unit is arranged to process the information, which is received from the user unit in a way, which is defined by the region affiliation (Bates, Fig. 16A and 19).

Regarding **Claims 12 and 36**, Bates further teaches that each of the user units has a unique user identity and is arranged to include the user identity in the information to the central unit (Bates, Figs. 16A, 17A-17B, Col. 1 lines 1-50).

Regarding **Claim 31**, Bates further teaches that the information sent is received from the user unit is sent back to the user unit (Bates, Fig. 19 elements 206 and 224).



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10-11, 13-17, 25, 35, 37-41, 45-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bates (US 5,515,491) in view of Sekendur (US 5,852,434).

Regarding **Claims 10, 25 and 35**, Bates fails to teach a plurality of position which define characters and in which the central unit is arranged to convert the received position to at least one character. Sekendur teaches a plurality of positions as claimed as well as a central unit arranged to convert the received position to at least one character (Sekendur, Fig. 3 and 6 element 16 Col. 3 lines 35-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the intelligent character recognition system, including the above features, as taught by Sekendur to the network system of Bates in order to allow for an intuitive way to enter characters with a pen instead of a keyboard (Sekendur, Col. 1 lines 7-16).

Regarding **Claim 11**, Bates fails to teach that each of the user units has a pen point. Sekendur teaches an input device which has a pen point (Sekendur, Fig. 6 element 9). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the input devices of the user units of Bates with the input

device of Sekendur in order to provide a way to physically record what is going on the imaginary surface (Sekendur, Col. 1 lines 7-16).

Regarding **Claims 13 and 37**, Bates fails to teach a plurality of products from which at least one position is recorded. Sekendur teaches an input device or product which can record at least one position (Sekendur, Fig. 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the input devices of the user units of Bates with the input device of Sekendur in order to provide an intuitive and inexpensive way of interaction with the computer system of Bates (Sekendur, Col. 1 lines 7-16).

Regarding **Claims 14 and 39**, Sekendur further teaches a subset of position-coding pattern, which codes a large number of position on an imaginary surface is reproduced on each of the products, the positions which are recorded by the user units being position on the imaginary surface and being recorded by means of the subset of the position-coding pattern on the product (Sekendur, Figs. 1-2, Col. 1 lines 7-16).

Regarding **Claim 15 and 40**, Sekendur further teaches that the position-coding pattern is constructed of symbols and each position on the imaginary surface is coded by a predetermined number of symbols, and in which each user unit is arranged to continually record the symbols to provide a description of the movement in the form of coordinates when it is moved across the subset in order to generated the information (Sekendur, Fig. 1-2, Col. 1 lines 7-16).

Regarding **Claim 16 and 41**, Bates teaches sending coordinate information to the central unit. Bates fails to teach that each user unit is arranged to record the information by recording at least two coordinates in coded form for each position, to decode the coded coordinates. Sekendur teaches that an input device arranged to record the information by recording at least two coordinates in coded form for each position, to decode the coded coordinates (Sekendur, Figs. 1-2 Col. 1 lines 7-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the input device of Bates with the input device of Sekendur in order to provide an intuitive and inexpensive way of interaction with the computer system of Bates (Sekendur, Col. 1 lines 7-16).

Regarding **Claim 38**, Sekendur further teaches that the pen makes a mark on the product during the recording of at least one position (Sekendur, Fig. 6 element 9 Col. 1 lines 7-16).

Regarding independent **Claim 17**, Bates teaches a system for information management (Bates, Fig. 16A, Col. 3 lines 1-50), comprising:

- a central unit and a plurality of user units which are arranged to record and send information to the central unit (Bates, Fig. 16A, elements 12, 12a-12c);

- a plurality of products used to record the information including positional information (Bates, Fig. 16A element 80), wherein

- particulars are stored in the central unit about a plurality of regions, each of which represents and are on an imaginary surface (Bates, Fig. 4 and 16A), wherein

each of the user units is arranged to record information which comprises at least one position on the imaginary surface by means of the products and send the information to the central unit (Bates, Fig. 4, 16A and 19 elements 130 138 and 140), and wherein

the central unit is arranged, in response to the receipt of the information from a user unit, to identify to which region the position belongs and to determine how the information is to be managed based on the region affiliation (Bates, Figs. 4, 16A and 19, Col. 3 lines 1-50).

Bates fails to teach that the products each have a subset of a position-coding pattern, which codes a large number of positions on the at least one imaginary surface. Sekendur teaches the use of a product which as a subset of a position-coding pattern, which codes large number of positions on an imaginary surface (Sekendur, Figs. 1-2, Col. 1 lines 7-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the products of Bates (Bates, mice and keyboards) with the products of Sekendur (Sekendur, stylus and coded substrates) in order to provide an intuitive and inexpensive method of coordinate input.

Regarding independent **Claim 45**, Bates teaches a method of managing information based upon position defined by a pointing device (Bates, Fig. 16A element 80, Col. 3 lines 1-50), comprising:

recording information using at least one user unit, wherein the information includes at least one position on a two-dimensional coordinate reference (Bates, Figs. 4

Art Unit: 2629

and 16A element 130 138 and 140), further wherein the two-dimensional coordinate reference represents physical position in a unique and continuous manner, and represents a physical area which is larger than any single practicable usable surface (Bates, Fig. 4);

sending the information to a central unit, wherein the central unit contains particulars about a plurality of region, and further wherein each region represents an area on the two-dimensional coordinate reference (Bates, Figs. 4, 16A and 19);

identifying which regions the at least one position belongs in response to the receipt of the information (Bates, Fig. 4 element 123); and

managing the information based upon rules associated with the identified region, wherein different regions are associated with different rules (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Bates fails to teach that a position associated with a machine-readable code as claimed. Sekendur teaches position associated with machine-readable code (Sekendur, Figs. 1-2 Col. 1 lines 7-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the position detection means of Sekendur, which is associated with machine-readable code to the system of Bates in order to add an intuitive and inexpensive way to enter coordinates (Sekendur, Col. 1 lines 7-16).

Regarding independent **Claim 53**, Bates teaches an apparatus for managing information associated with products (Bates, Fig. 16A element 80, Col. 3 lines 1-50) comprising:

at least one user unit configured to record information including at least one position described in a two-dimensional coordinate reference represents physical position in a unique and continuous manner (Bates, Figs. 4 and 16A element 130 138 and 140), and represents a physical area which is larger than any single practicable usable surface (Bates, Fig. 4); and

a central unit, configured to receive the information from the at least one user unit (Bates, Fig. 16A element 12), which identifies a region on the two-dimensional coordinate reference based upon the at least one position, and manages the information based upon rules associated with the identified region, wherein different regions are associated with different rules (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Bates fails to teach that a product associated with a machine-readable code as claimed (Sekendur, Figs. 1-2, Col. 1 lines 7-16). Sekendur teaches product associated with machine-readable code not collocated with respect to each other. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the position detection means of Sekendur as a whole, which is associated with machine-readable code to the multi user system of Bates in order to add an intuitive and inexpensive way to enter coordinates as an input (Sekendur, Col. 1 lines 7-16).

Regarding **Claims 46 and 54**, Sekendur further teaches that the machine-readable code comprises a plurality of symbols, each symbol contributing to the coding of at least two unique positions on the two dimensional coordinate reference (Sekendur, Figs. 1-2, x and y coordinates).

Regarding **Claims 47 and 55**, Sekendur further teaches that each symbol comprises a nominal position and a mark (Sekendur, Figs. 1-2 nominal coordinate and physical marks on the substrate).

Regarding **Claims 48 and 56**, Sekendur further teaches that the mark is displaced from the nominal position (Sekendur, Fig. 2).

Regarding **Claims 49 and 57**, Bates further teaches storing particular in the central unit, which associate an owner with a region (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 50 and 58**, Bates further teaches forwarding information by the central unit to a recipient (Bates, Figs. 4, 16A and 19).

Regarding **Claims 51 and 59**, Bates further teaches storing the information in the central unit in a location specified by the rules associated with each region (Bates, Figs. 4 and 16A, Col. 3 lines 1-50).

Regarding **Claims 52 and 60**, Bates further teaches that the information includes a unique user identity associated with the user unit (Bates, Figs. 16A, 17A-17B, Col. 1 lines 1-50).

***Allowable Subject Matter***

**Claims 61-63** are allowed.

The following is an examiner's statement of reasons for allowance:

Prior art fails to teach "wherein the imaginary surface represents physical position in a unique and continuous manner, and wherein the physical positions are coded by a position coding pattern and wherein the position coding pattern is incapable of being present in its entirety on any single base".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

Applicant's arguments filed January 8<sup>th</sup>, 2007 regarding **Claims 1-42 and 45-60** have been fully considered but they are not persuasive.

- 1) The result of the meeting with the Quality Assurance Specialist confirmed the 35 U.S.C. 112, second paragraph rejection as valid and necessary.
- 2) The examiner notes that there was no IDS filed on May 24<sup>th</sup>, 2006 and all previous IDS submissions have been considered.
- 3) The examiner made no admission that the specification provides sufficient evidence to one skill in the art regarding the objected terms.



Art Unit: 2629

4) The examiner again states that Bates clearly teaches that the imaginary surface (the software representation of the billboard) represents physical position in a unique and continuous manner (the physical embodiment of the billboard) which is larger than any single practicable usable surface (which the examiner has clearly states as indefinite, the examiner thereby interprets practicable usable surface to be as large as a piece of printer paper).

5) The patent number as since been corrected.

6-8) Please see response #4.

9) The examiner maintains that the combination of Bates and Sekendur is valid because both Bates and Sekendur teach the use of digital signal processing but Sekendur further teaches that a physical copy can be made which has benefit as stated by the above rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ke Xiao whose telephone number is (571) 272-7776. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 14<sup>th</sup>, 2007 - kx -



**SUMATI LEFKOWITZ**  
**SUPERVISORY PATENT EXAMINER**